Welcome to Math!

Syllabus 2019-2020

Contact Information: Melissa Balser

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Help Session: Tuesdays from 4:05-4:50 (after dismissal). Please email me (Ms. Balser ☺) no later than 6:00 PM on Monday to let me know you/your student will be attending.

Daily Required Materials:
- ❑ Spiral OR composition notebook
- ❑ 2 sharpened pencils
- ❑ 1 pen/marker
- ❑ 3-inch binder (the same 3-inch binder will be used for all classes)
- ❑ 1 divider designated for math in binder

Students may choose to have an eraser (recommended – no one's perfect ☺), glue stick, scissors, and/or colored pencils. These supplies are NOT required and will be provided to students when and if they are needed.

Interactive Notebook: All notes and most practice materials will be completed in a student's notebook. Some students may need to use 2 notebooks throughout the course of the year. *If this notebook is lost, it needs to be replaced immediately*. Interactive notebooks will serve as our textbook and are often referenced throughout the year.

Homework: Homework will be assigned daily (for the most part). *Students are expected to complete homework in pencil, neat and organized, in their math notebooks*. When we check homework at the beginning of class, students are expected to have this with them to review and ask questions concerning problems they did not understand.

Grading Categories and Weights:
- 📚 Summative Assessments (test, performance task, projects) – 55%
- 📚 Formative Assessments (quizzes, mini-projects) – 20%
- 📚 Progress Reporting – 20%
- 📚 Homework– 5%

Absent Work: It is the responsibility of the student to ask for missed assignments the day they return. Students have the same number of days they were out to turn in absent work for full credit.

Late Work: Missing homework and classwork (progress reporting category) can be submitted any time UNTIL the end of the unit. After the unit has ended, the time for valuable feedback on an assignment has passed. Late assignments will be penalized 11 points.

Recovery Policy: Recovery and assessment corrections are designed to help a student understand a skill they did not show mastery on. When students attend a help session, it gives us an opportunity to work one-on-one to correct misconceptions. **For this reason, students must attend a help session to do recovery for any math assessment**. They cannot be completed at home.

Students can do corrections on tests and quizzes below an 80. Recovery will not be accepted on classwork or homework.

Your student's teacher requests that you sign the syllabus electronically by visiting https://tinyurl.com/BalserSyllabus19 (← website is case sensitive)

Math 6 Standards & Pacing

The Math 6 curriculum covers all of the content below. As an advanced class, we may go into more detail, layer in a few 7th grade standards, and/or go at a faster pace than a typical on-level class. The unit order listed below is a guide and subject to change.

Unit 1 – *Number Fluency and Operations* (NS): Students will use long division, all operations with decimals, and division of fractions to solve real world problems. Additionally, students will apply common factors and multiples to real world situations.

Unit 2 – *Rates, Ratios, and Proportional Reasoning* (RP): Students will write ratios in various ways and use equivalent ratios to solve problems. Students will also find and utilize unit rates and describe what a unit rate means in a given situation.

Unit 3 – *Expressions* (EE): This unit is our introduction into algebra. Students will translate between verbal statements and algebraic expressions, using variables to represent an unknown amount. Students will identify like terms and use the distributive property to simplify algebraic expressions.

Unit 4 – *Equations and Inequalities* (EE): Students will translate and solve one-step equations using the standard algorithm. Students will write and graph basic inequalities given a real world situation.

Unit 5 – *Geometry* (G): Students will calculate the area of complex shapes that can be decomposed into rectangles and triangles, including using nets to find the surface area of a 3D figure. Additionally, students will calculate the volume of a 3D figure, including those with fractional side lengths.

Unit 6 – *Statistics* (SP): After learning to identify a statistical questions, students will use statistical questions to collect and analyze data using measures of center and variability. Students will explore data distribution using line plots and box-and-whisker plots.

Unit 7 – *Introduction to Integers* (NS): Students will be introduced to the concept of negative numbers and absolute value. Students will use integers to describe real world situations, including debts/credits and elevation. Additionally, the four-quadrant coordinate plane is introduced and used to explore situations involving each quadrant.

Want more information? Unit Overviews & Georgia Standards of Excellence visit
https://www.georgiastandards.org/pages/parents.aspx

Standards of Mathematical Practice

The following eight practices are positive habits of mind that mathematicians use in their work. These are not explicitly taught (unlike the standards above) but are just as important. These practices focus on the process instead of the end-result and help to build critical thinking and problem solving skills in young learners.

SMP 1: Make sense of problems and persevere in solving them.
SMP 2: Reason abstractly and quantitatively.
SMP 3: Construct viable arguments and critique the reasoning of others.
SMP 4: Model with mathematics
SMP 5: Use appropriate tools strategically.
SMP 6: Attend to precision.
SMP 7: Look for and make use of structure.
SMP 8: Look for and express regularity in repeated reasoning.

Math 6A Standards & Pacing

*The Math 6A curriculum covers all of the content below. By the end of the school year, students who are in Math 6A, will have completed the remainder of the 6th grade curriculum as well as **all** of the 7th grade curriculum. There is a significant overlap between the 6th and 7th grade curriculum. As a result, we will follow the 7th grade pacing guide and layer the missed 6th grade standards in as needed.*

Unit 1 – *Operations with Rational Numbers* (NS): In this unit, students will extend previous knowledge of operations with positive numbers to add, subtract, multiply, and divide integers and rational numbers (positive and negative fractions and decimals). Students will also fluently convert among fractions, decimals, and percents. Students will use their knowledge of rational numbers to solve real-world problems.

Unit 2 – *Expressions & Equations* (EE): In this unit, students will solve multi-step equations in a single variable. Students will use their knowledge of rational numbers to simplify algebraic expressions and use variables to represent unknown amounts. In the second part of the unit, students will write, solve, and graph the solution to a 2-step inequality.

Unit 3 – *Ratios & Proportional Reasoning* (RP): This unit will be broken into two smaller pieces. In unit 3A, students will identify proportional relationships through the analysis of graphs, tables, equations, and diagrams. They will also describe the relationship between unit rates and proportionality. In unit 3B, students will solve multi-step problems involving percents (tax, fee, gratuity, markup, markdown, commission, and simple interest).

Unit 4 – *Geometry* (G): This unit will be broken into two smaller pieces. Unit 4A will focus on special angle pairs and finding unknown angle measurements. Students will also use angle pairs to set up and solve equations for unknown values. Unit 4B will cover real-world problem solving involving area of complex shapes and surface area and volume of prisms.

Unit 5 – *Inferences & Statistics* (SP): Our statistics unit is a continuation of statistical analysis from sixth grade. Students will compare data sets using measures of center and variability as well as data distributions in line plots and box-and-whiskers plots.

Unit 6 – *Probability* (SP): Students will study probability of simple and compound events using tables, lists, and tree diagrams to identify the likelihood of an event occurring. Students will also identify the likelihood of an event on a continuum of 0 (impossible) to 1 (certain).

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Math 7 Standards & Pacing

The Math 7 curriculum covers all of the content below. As an advanced/accelerated class, we may go into more detail, layer in a few 8th grade standards, and/or go at a faster pace than a typical advanced class. The unit order listed below is a guide and subject to change.

Unit 1 – *Operations with Rational Numbers* (NS): In this unit, students will extend previous knowledge of operations with positive numbers to add, subtract, multiply, and divide integers and rational numbers (positive and negative fractions and decimals). Students will also fluently convert among fractions, decimals, and percents. Students will use their knowledge of rational numbers to solve real-world problems.

Unit 2 – *Expressions & Equations* (EE): In this unit, students will solve multi-step equations in a single variable. Students will use their knowledge of rational numbers to simplify algebraic expressions and use variables to represent unknown amounts. In the second part of the unit, students will write, solve, and graph the solution to a 2-step inequality.

Unit 3 – *Ratios & Proportional Reasoning* (RP): This unit will be broken into two smaller pieces. In unit 3A, students will identify proportional relationships through the analysis of graphs, tables, equations, and diagrams. They will also describe the relationship between unit rates and proportionality. In unit 3B, students will solve multi-step problems involving percents (tax, fee, gratuity, markup, markdown, commission, and simple interest).

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